PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

THREE NEW SUBSPECIES OF GRASSHOPPER MICE.

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Three hitherto unnamed forms of grasshopper mice, in the collection of the United States National Museum, are described below.

Onychomys torridus clarus subsp. nov.

Type from Keeler, Inyo County, California. U. S. National Museum (Biological Survey Collection), No. $\frac{25}{3}\frac{54}{28}\frac{53}{87}$, skin and skull of adult \mathcal{O} (teeth considerably worn). Collected December 30, 1890, by Vernon Bailey. Orig. No. 2314.

Diagnosis.—Like Onychomys torridus longicaudus, but clearer and brighter colored, with very little dark streaking above. Resembling O. t. pulcher, but much more intensely pinkish-cinnamon. Skull as in longicaudus, but with anterior palatine foramina averaging longer, reaching backward fully to line of fronts of first molars.

Color of adult in full winter coat: upperparts bright pinkish-cinnamon, palest on nose and head and most intense and glossy on lower back and rump, with very little or no darker admixture from the hair tips. Underfur dark neutral-gray; hairs with subapical band of buff, tipped with deep cinnamon. Ears very thinly haired, narrowly rimmed with brown; tufts at bases creamy-white, comparatively inconspicuous. Nose, cheeks, lower sides, limbs, hands, feet, and underparts, white, the underfur narrowly neutral-gray. Tail whitish, with narrow, indistinct stripe of grayish-brown along upper side for two-thirds its length.

Measurements of type.—Total length, 143 mm.; tail vertebre, 51; hind foot, 20.5; ear from notch in dry skin, 15.7. Skull: Condylobasal length, 23.3; zygomatic breadth, 13.2; breadth of braincase, 11.6; maxillary tooth row, 3.7.

Onychomys leucogaster capitulatus subsp. nov.

Type from lower end of Prospect Valley, 4500 feet, Hualpai Indian Reservation, Grand Canyon, Arizona. U. S. National Museum (Biological Survey Collection), No. 202612, skin and skull of adult \eth (teeth

moderately worn). Collected September 26, 1913, by E. A. Goldman. Orig. No. 22234.

Diagnosis.—Coloration much like that of Onychomys leucogaster ruidosæ; but size less, and skull considerably smaller and weaker. Darker than O. l. melanophrys; lighter, more reddish-brown, than O. l. fuliginosus.

Color.—The color, in all pelages, closely resembles that of O. l. ruidosw. Measurements of type.—Total length, 142; tail vertebræ, 43; hind foot, 21; ear from notch in dry skin, 14.6. Skull: Condylobasal length, 25.1; zygomatic breadth, 14; breadth of braincase, 13.0; maxillary tooth row, 4.3.

Onychomys leucogaster breviauritus snbsp. nov.

Type from Fort Reno, Oklahoma. U. S. National Museum, No. $\frac{1}{3}\frac{n}{18}\frac{14}{18}\frac{1}{2}\frac{1}{2}$, skin and skull of adult Q (teeth moderately worn). Collected February 16, 1890, by Dr. J. C. Merrill. Orig. No. 18.

Diagnosis.—Most like Onychomys leucogaster longipes, but darker and richer colored, with shorter tail, smaller hind foot, and smaller ears.

Color of adult in full winter pelage: Head and back a rich blackish-brown, the ground color pinkish-cinnamon, the overlying hairs with long blackish tips which streak and darken the ground color; cheeks and sides with less of the dark streaking, the hips and lower rump almost pure pinkish-cinnamon. Center of nose gray; cinnamon spots at base of whiskers, between the gray of nose and white of lips. Ear tufts cinnamon-buff; tail grayish-brown above to near tip, sharply bicolor, the underside and tip white. Arms, hands, lower legs, and entire underparts white, with dark gray underfur everywhere except on chin.

Measurements of type.—Total length, 164; tail vertebræ, 42; hind foot, 21; ear from notch in dry skin, 13.2. Skull: Condylobasal length, 27.4; zygomatic breadth, 15.1; breadth of braincase, 12.5; maxillary tooth row, 4.7. Average measurement of ear from notch in dry skin in seven adults is 12.8; in twelve adults of O. l. longines, 16.1.